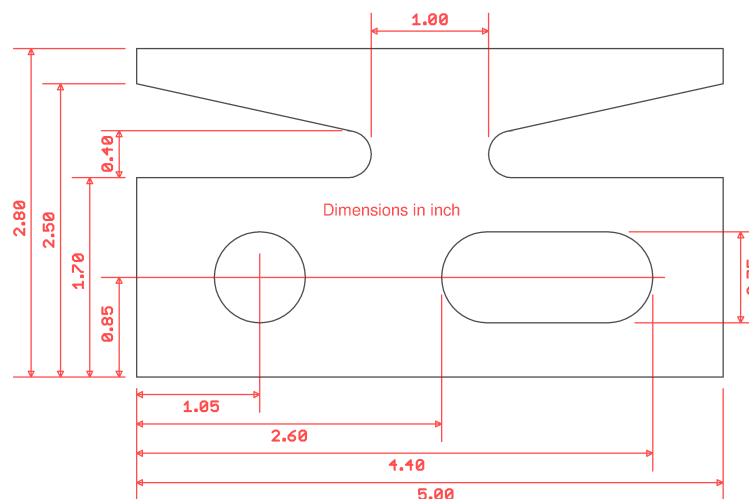


After I was made aware of the [Drop-N-Stay anchoring system](#) I wanted one! Unfortunately the manufacturer had closed shop in May 2012 so I had no chance to buy a system. Sure, a similar effect can be achieved with the Anchor Buddy® but I just don't like to have the expensive anchor hanging on some rubber string alone. In addition it's a lousy solution for a stern anchor (I don't use the tow hook for an anchor) besides the fact that it ain't cheap either.

The nice thing is that this type of "suspension" will take away shock loads from the anchor and instead put a more constant load on the anchor rode which will make the anchor hold a lot better.

Time for some reverse engineering and hopefully be able to add some improvements or simplifications. Only the V-shaped version Drop-N-Stay Deuce really sparked my interest (but see below) as it can be used for stern and bow anchoring and with both ends on the same bow cleat it will work too. Some experiments with makeshift components showed that it was worthwhile to make a replica.

Step one of the final solution was the special cleat to attach to the anchor rode. Easy to make a CAD file for it and to cut it out from glass-filled UHMWPE, 1/2" thick. As an improvement to the original all edges which can come in contact with the rope or cord are rounded to prevent them from slowly but surely cutting either the anchor rode or the shock cord into pieces. And glass-filled UHMWPE is a lot stronger than the StarBoard of the original.



Special Cleat to attach anchor rode. Close in dimensions is close enough and good...

This size works for 3/8" and 1/2" shock cords and anchor rodes. Dimensions aren't critical. The edges around the two holes and inside the cleat "arms" are rounded to ~1/16" to prevent chafing. The rope itself gives sufficient resistance to hold itself if hooked up right (see picture below).

Tested for strength by hooking it up with 3/8" anchor chain and 1/4" bolts at the round hole and with 2 screws at the cleat. Then I pulled with my car on one side and a REALLY strong pole on the other until the bolts gave up! Fortunately I had a piece of plywood behind the car when the chain jumped at it after one of the 1/4" bolt broke. OK, I used Chinese "rubber steel" bolts for this test as I didn't have real bolts at hand but it still proves the point: this part will be the last one to give way! The bungee cord or shock cord will give a maximum of around ~200lbs of pull (3/8" bungee cord) when it is fully extended and the anchor rode will take over.

Investigating the way how to make the eyes in the shock cord to attach them to the cleats revealed something the inventor of the Drop-N-Stay always claimed (and he's right!). The usual way to make them is to use hog rings crimped around the cord. This may work for your typical bungee cords to hold down a tarp (and they usually fail after a short while too) but not for the loads in an anchor system! The original uses specially

machined SS clamps and by luck I could get one from a broken system (chopped off by the owners prop). They looked a lot better than hog rings but I have no way to have them machined. After a lot of failed attempts the final solution turned out to be very easy. Shows again that one should never over-engineer things! Just a bowline knot with Yosemite tie-off! No metal at all and free except for a few more inches of shock cord. Under an optional piece of shrink tube they look pretty nice too and in tests they were more rugged than the expensive original SS stuff! A water bowline knot was a close second place if you don't mind the direction of the end. In testing these held about 1.5 times the load as the original with the special clamps before serious deformation was caused. But both have no problem with the expected maximum 200lbs load before the anchor rode should take over.



Bowline knot with Yosemite tie-off



Water Bowline

**UPDATE:** At first I tried a hog ring to attach the shock cord to the special cleat but it never worked well and always moved. After some time I got tired of the hog ring as the weak link of the system. Replacement is a Figure 8 follow through knot. Cheap as in free and better. Did I mention it already? Don't over engineer things with modern technology, the old sailors knew very well what they did.... For this method one better ties the knot at the special cleat first and then the two eyes at the ends to make them equal length.



But I am pretty good making it the other way.....

### **... the Drop-N-Stay replica is ready to use!**

Determine the required length of the anchor rode based on the desired scope, deduct ~8' and install the special cleat at this point. Mount the loop ends of the shock cord either on the side (for bow-side anchoring) or the stern cleats and attach the anchor rode with additional slack (see below) to either the bow cleat or the tow hook. Drop the anchor and set it. Done.....

Some tips:

As you never want to pull the shock cord beyond its maximum length of 2x the cut length the anchor rode should be tied to either the bow cleat or a center stern attachment point (like the towing hook). It should have around 5-6' slack for the 3/8" model and 7-8' for the 1/2" model with the shock cord not extended at all. The way I adjust it is that I pull on the anchor rode until the shock cord gets a little slack, then I let out 6' more and attach the rode to the cleat. As I am lazy I originally used a [Danik hook](#) (similar function: [SlideKnot](#)) for this. After someone (no, I won't disclose who) dropped my Danik Hook into at least 40' deep water I didn't want to buy another one for \$29.99 + shipping. Today a "Rope Ratchet<sup>®</sup>" \*\*) is doing the same job for \$10 with its hook changed to an SS carabiner clip (+\$2.50).

Only use black shrink tube to cover the knots or even better none! The white and colored ones are made from a different material which gets harder after shrinking and falls apart pretty fast when exposed to the sun. Don't

use the “better ones” with hot glue liner either. The glue will stick to the cord and when it gets stretched it will tear them into pieces. Guess why I know..... As there's nothing which could scratch the boat I meanwhile have the latest version displaying my seamanship with beautiful nautical knots.

When you anchor at the beach or shore it isn't a good idea to let the keel bounce onto the ground all the time. With the Drop-N-Stay (and the replica) there is an easy solution! Drop your anchor where you want it to be with sufficient scope and attach it to the stern cleats. Drive further to the beach and when you are around 5'-6' away from the point you want the boat to be “parked” attach the special cleat to the anchor rode with the ends hooked up to the stern cleats. Give the anchor rode around 7-8' of slack and go further towards the beach/shoreline. Use a shore anchor \*) or whatever will hold the line to attach the bow to shore and unload. Now extend the bow line around 5'-6' and the Drop-N-Stay will pull the boat back. When you want to board again just pull the boat towards shore with the bow line! If you make the first 3'-5' of bow line from a left over piece of shock cord the shock load on the shore anchor gets a lot lower too! I actually use a modified version of the single cord Drop-N-Stay type attachment (my Shore-N-Stay or Dock-N-Stay 2) there as I don't like to stretch a cord at the bow when I retrieve. I used the same  $\frac{3}{8}$ ” cord which turned out fine as the bow now has a lower spring constant than the stern (with 2 cords) which helps keeping the stern anchor put.

### **Experience:**

I used my final Drop-N-Stay system(s) for a year so far and it works great! The boat size ranges shown above are approximate and we couldn't test it on too many. All we had was a 17.5' runabout (mine), a 19.5' runabout and a 25' cruiser (the wake-maker for testing). It is important to NOT oversize the system! The  $\frac{1}{2}$ ” cord works a lot worse on a smaller and lighter (17.5') boat! It may well be that for really small boats (<15'?) a  $\frac{1}{4}$ ” cord would be more appropriate. Would it work as great for ocean use? I guess yes but don't know for sure as I can't test it there.

We especially like the above explained beach anchoring as this is what we do most of the time when we are not at one of the courtesy docks.

As I had to order a lot more of the glass filled UHMW material than I needed to make my two systems and 3 for fellow boaters I can machine some more cleats until it is gone. Had to already make one more as the donor of the eye from the destroyed original was eager to get one again after donating the original one plus anchor and minus the loop to Neptune.....

If you want to make one of these systems too and need a special cleat please contact me and I can make it as shown above for my cost plus shipping as long as I have material which unfortunately is quite expensive in small quantities. Please be aware that they are hand made and NOT CNC quality!

As mentioned above both diameters of the shock cord are available as marine bungee cords from your local home improvement store. For the final version(s) I got US made shock cord from ebay seller rushazzled (justharris and theropeguy1 have the same) at a much lower price, good to have some spare material. Just search for “shock cord” and you'll find them.

With some left-over shock cord you can make some “Dock-N-Stay” too. A bowline knot on each end and done, <\$4 a piece. Meanwhile I can make a bowline knot with Yosemite tie-off blind folded but I still struggle to get the loop size right without some tweaking.....

After wasting money for material more than twice the cost of what I would have paid for the original I finally have “my very own” Drop-N-Stay! Was it worth it? I'd say yes but I would have rather ordered a finished product instead of doing a lot of trying and testing. At least I got some other things made too which make our

boating experience even better. As long as the [Drop-N-Stay website](#) is still up (gone now) please watch their videos! Lots of good information to be found there.

Side effects: all projects I make are carefully investigated to make sure that I don't forget to get some more tools. This one justified the purchase of a nice Bosch variable speed palm router and a set of routing bits. To make it even more usable I build a router table for it too which then justified to buy yet another DeWalt Miter saw stand.

If you find ways to improve these parts or new ways to use them please let me know and I'll add them here..... Just don't tell me which anchor is the best as I don't want to be part of a religious war! I use mine and you use whatever you like best.

Have fun, enjoy safe boating and always have an anchor which holds!

Jürgen

[http://www.pinzi.us/boating/boating\\_library.php](http://www.pinzi.us/boating/boating_library.php)

\*) I tried a lot of these special "marine" shore or beach anchors borrowed from friends and they all had issues with the gravel or hard soil we have at the lake. Was this the reason they gave them to me without hesitation and were never eager to get them back?

Then I tried something made for a completely different use and it worked a lot better and is a lot cheaper. An auger style pole for a beach umbrella: [Sand Grabber](#) or [Earthworm](#) or [Sand Screw](#) . A LOT cheaper and they work like a champ. Nice side effect: double use as umbrella base for the admiral!

If you want a sturdier version you can buy an auger tip (i.e. [auger for boat lift](#) or [here](#)) and add your own pipe(s). Unlike the models you hammer into the ground with an integrated "hammer" (like Shore Spike or Easy Shoreline Anchor) which never worked well here or where you need a real hammer to start with (i.e. Beach Shoreline Anchor, Sand Spike: bend tips after one use by the owner) these augers just screw in and stay in place and don't require "ideal sand". Sure, there are places where nothing goes in but so far I am happy with the Sand Grabber and Earthworm I carry on board. Always attach the line as low as possible to give it the least lever!

**Update:** Just got my hands on a special marine anchor and surprise! Besides the fact it works decent (the Earthworm is still my favorite) the price is OK too. It's the [Ironwood Sand Anchor Plus, \\$39.95](#) (much cheaper found from online vendors) and it even includes a storage bag. Just don't use it as they show.... The line should be attached as low as possible.

**End Update**



Sand Grabber



Earthworm



Sand Screw



Auger tip



**Update:** Sand Anchor Plus

\*\*) "[Rope Ratchet](#)"<sup>®</sup> is operating similar to these more expensive marine hooks and available for different rope diameters. Even our local home improvement stores carry them at a reasonable price (lower than directly from the manufacturer). The crazy thing is that the Danik hook has a lot more resistance when you try to pull the rope through but it doesn't hold better. When you want to tighten (shorten) the line with the "Rope Ratchet"<sup>®</sup> all you have to do is pull, the beauty of a pulley style. With the Danik hook you sometimes have to hold the lever down a bit. I lost count how many of the "Rope Ratchet"<sup>®</sup>s I own meanwhile in all the different sizes. They are so universal that I just use them everywhere, even as tie-downs. To keep them in good order when submersed into water I give them a good shot of silicone oil before the first use and then another one every few month. That keeps them well operating for a long time.

Some pictures but sorry, none "in action" (yet) as we always forget the camera. We really should buy one of these waterproof and floating ones!

The "special cleat"

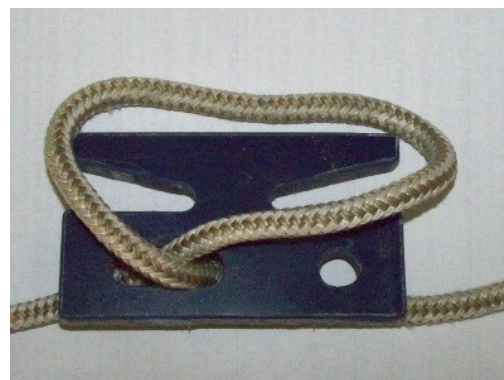


Not as nice and smooth as a CNC machine could do it but to me it's a utility item and function goes over beauty.

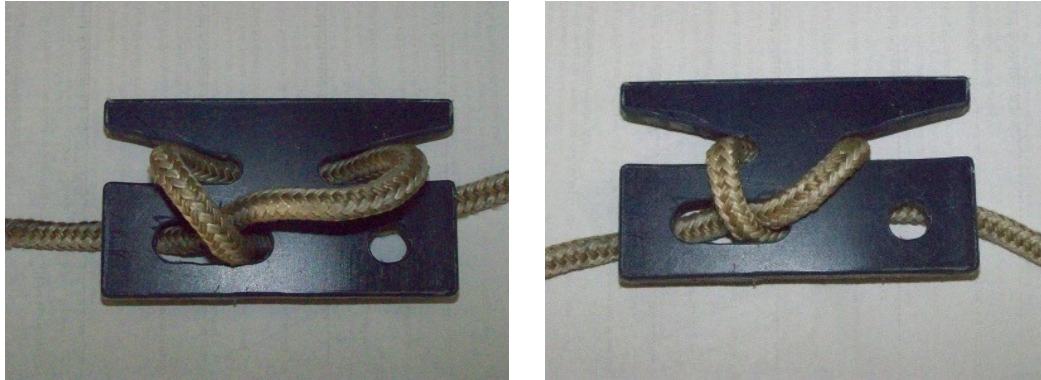
Bowline knot with Yosemite tie-off (tied, dimensions)



How to attach the anchor rode



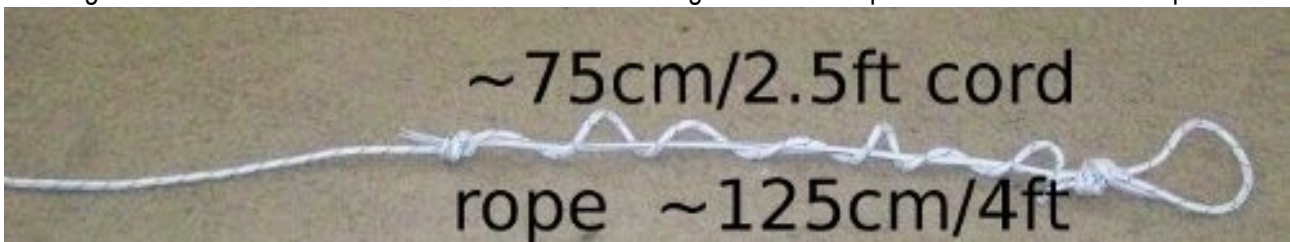




**UPDATE:** the new version of the Drop-N-Stay Deuce replica with figure 8 follow through knot instead of a hog ring. No reason to use a shrink tube.



Docking line with “shock absorber” made from left over bungee cord and a piece of double braided rope:



**Note 1:** everything underlined is linked to the web. You can go there if your PDF reader allows you to follow links.

**Note 2:** As soon as I find out that the inventor of this system eventually re-opens shop DO NOT ask me to make you a cleat any more! He invented it and if he wants to make money with it again I will not interfere with his business in “competing” with him! I only made the replica because I couldn't order a commercial one any more and despite all effort I didn't find a way to contact him.

**Note 3:** It looks like the seller and inventor of the Drop-N-Stay has completely given up. The website is no longer accessible and shows a domain name for sale. That's why I changed as many links to still existing youtube videos and added two more links. It's a real shame as it works extremely well and I'm sure that it could be a useful add-on for many. Looking at the prices he charged for it I have the uneasy feeling that he made almost no money from it especially due to the fact that he had so many mechanical parts to manufacture. Using only

the cleat as a manufactured part and “all knots” for the rest would most likely have helped it a lot and made it even better.

Some more videos:

<https://www.youtube.com/watch?v=SwubixG0bko>

<https://www.youtube.com/watch?v=Klmb--zW-SA>

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